



**U.S. Department of Energy
Technical Qualification Program**

***Conduct of Assessments
Topical Area***

Study Guide

| |
|------------------------|
| <p>Glossary</p> |
|------------------------|

March 1997

Appendix A

| | |
|--------------------------------|---|
| Assessment/Verification | <p>The act of reviewing, testing, checking, conducting surveillance, auditing, or otherwise determining and documenting whether items, processes, or services meet specific requirements. The term assessment and verification as used in DOE 5700.6C, are synonymous; their use is determined by who is performing the work. Assessments are performed by or for senior management. Verifications are performed by the line organization (DOE 5700.6C). The term assessment is synonymous with the term verification when used to describe quality assurance activities.</p> <p>An estimate or determination of the significance, importance, or value of something (The ASQC Quality Auditing Technical Committee).</p> |
| Audit | <p>A planned, independent, and documented assessment to determine whether agreed-upon requirements are being met (The ASQC Quality Auditing Technical Committee).</p> |
| Contractor | <p>Means any person under contract with the Department of Energy with responsibility to perform activities in connection with a nuclear facility (10 CFR 830.3(a)).</p> |
| Corrective Action Plan | <p>A defined and documented strategy for the correction of findings, which defines the deficiency, describes the actions that will be taken, assigns responsibility for those actions, discusses how these actions will address and correct the findings, and indicates the dates by which these actions will be complete (DOE-STD-3006-93).</p> |
| Criteria | <p>Rules or tests against which the quality of performance for a core requirement can be measured. Fundamental criteria are contained in DOE Orders</p> |

and policies and in statutory requirements. Criteria are also contained in Nuclear Regulatory Commission (NRC) regulations, Institute of Nuclear Power Operations (INPO) guidelines, professional codes and standards, and best industry practices (DOE-STD-3006-93). They are most effective when expressed quantitatively. Fundamental criteria are contained in policies and objectives, as well as codes, standards, regulations, and recognized professional practices that DOE and DOE contractors are required to observe (DOE 5482.1B).

Deficiency

The variance of an activity from established requirements, policies, procedures, standards, or criteria. Deficiencies are categorized in the following three levels:

1. **Concern:** An indication of a programmatic breakdown or widespread problem supported by several findings. The operating contractor is expected to respond to each identified concern, including a determination of the root cause of the concern and an action plan including completion dates which will adequately resolve the concerns.
2. **Finding:** An identified deficiency (DOE-STD-3006-93). An individual item which does not meet requirements. Findings should be verified for factual accuracy to the greatest extent practical. Findings include: situations where an applicable requirement is not included in programs, procedures, or practices or if a requirement is included but is not adhered to during applicable activities. Findings do not require written corrective action plans unless specifically requested.
3. **Observation:** A minor variance from the desired level of performance. Observations technically meet the requirements; however, minor enhancements in controlling program or

increased diligence in implementation of the requirements will improve operations. Observations do not require written corrective actions plans unless specifically requested.

| | |
|-----------------------------|---|
| DOE Contractor | Any prime contractor or subcontractor subject to the contractual provisions of 48 CFR 923.70, 48 CFR 970.23, or other contractual provisions where DOE has elected to enforce Environmental, Safety, and Health requirements by specific negotiated contract provisions (DOE 5482.1B). |
| Environmental Survey | A documented, multidiscipline assessment (with sampling and analysis) of a facility to determine environmental conditions and to identify environmental problem areas of environmental risk requiring corrective action (DOE 5482.1B). |
| Evaluation/Evaluate | The process to determine the significance or worth of something by careful appraisal or study (DOE-STD-3006-93). |
| Finding | A statement of fact concerning a condition in the ES&H program that was investigated during an appraisal. It may be a simple statement of proficiency. or a description of a deficiency (i.e., a variance from procedures or criteria). Both the severity and potential consequences should be addressed in describing a deficient condition (DOE 5482.1B). |
| Functional Appraisal | A documented review of an Environment, Safety, and Health specialty discipline performed in accordance with written guidance and criteria to verify by examination and evaluation of objective evidence at the facility and/or operation that applicable elements of the program have been developed, documented, and effectively implemented in accordance with specific ES&H requirements and needs. (DOE 5482.1B). |

| | |
|-----------------------------|---|
| Graded Approach | The process by which the level of analysis, documentation, and actions necessary to comply with a requirement are commensurate with: (1) the relative importance to safety, safeguards, and security; (2) the magnitude of any hazard involved; (3) the life cycle stage of the facility; (4) the programmatic mission of a facility; (5) the particular characteristics of a facility; and (6) any other relevant factor (10 CFR 830.3(a); DOE-STD-3006-93; see also DOE 4330.4B). |
| Internal Appraisal | An examination and evaluation by the operating level (either Federal or contractor) of those portions of its internal Environmental, Safety, and Health program, program plan implementation, and operations retained under its direct control. (DOE 5482.1B). |
| Item | An all inclusive term used in place of any of the following: appurtenance, assembly, component, equipment, material, module, part, structure, subassembly, subsystem, system, unit, or support system (10 CFR 830.3(a)). |
| Life Cycle Plan | An analysis and description of the major events and activities in the life of a functional unit from planning through decommissioning and site restoration. The plan documents the history of the functional unit and forecasts future activities, including major line item and expense projects and their duration, relationships, and impact on life expectancy. The plan also describes maintenance practices and costs (DOE 4330.4B). |
| Management Appraisal | A documented determination of managerial effectiveness in establishing and implementing Environment, Safety, and Health program plans which conform to DOE policy requirements. It is based on analysis of functional appraisals, internal appraisals, and on the application of appropriate criteria. The appraisal is a review and evaluation of management performance covering all Environment, Safety, and Health disciplines and management responsibilities to assure proper program balance. (DOE 5482.1B). |

| | |
|----------------------------------|--|
| Objective Evidence | Any documented statement of fact, other physical condition, information, or record (either quantitative or qualitative) pertaining to the quality of an item or activity based on observations, measurements, or tests which can be independently verified (DOE-STD-3006-93). |
| Process | Means a series of actions that achieve an end or result (10 CFR 830.3(a)). |
| Quality | Means the condition achieved when an item, service, or process meets or exceeds the user's requirements and expectations (10 CFR 830.3(a); see also DOE 5700.6C). |
| Quality Assurance | Actions that provide confidence that quality is achieved (10 CFR 830.3(a); see also DOE 5700.6C). The planned and systematic actions necessary to provide adequate confidence that a facility structure, system, or process will perform as satisfactory. Quality assurance includes: quality control, which comprises all those actions necessary to control, and verify the features and characteristics of a material, process, product, or service to specific requirements. |
| Quality Assurance Program | The overall program established by an organization to implement the requirements of this Order. The program assigns responsibilities and authorities, defines policies and requirements, and provides for the performance and assessments of work (DOE 5700.6C). |
| Quality Audit | A systematic and independent examination and evaluation to determine whether quality activities and results comply with planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve objectives (ANSI/ASQC Q1-1986, Generic Guidelines for Auditing Quality Systems). |
| Quality Surveillance | The continuing monitoring and verification of the status of procedures, methods, conditions, products, |

processes, and services and the analysis of records in relation to stated references to ensure that requirements for quality are being met.

Record

Means a completed document or other media that provides objective evidence of an item, service, or process (10 CFR 830.3(a)).

Self Assessment

A systematic evaluation of a facility maintenance program, including the activities and practices, utilizing the performance objectives and criteria from each element of the Maintenance Management Program defined in Chapter 1 of this Order (DOE 4330.4B).

Service

Means the performance of work, such as design, construction, fabrication, inspection, nondestructive examination/testing, environmental qualification, equipment qualification, repair, installation, or the like (10 CFR 830.3(a)).

Technical Safety Appraisal

A documented, multi-disciplined appraisal of selected Department reactors and nuclear facilities conducted by a team selected by the Deputy Assistant Secretary for Safety, Health, and Quality Assurance (EH-30). They assure proper Department wide application of particular safety elements of the Environment, Safety, and Health program, nuclear lessons learned, and appropriate licensed facility requirements. (DOE 5482.1B).

Verification/Verify

This is an activity that encompasses: (1) reviewing documented, objective evidence for adequacy as measured against established requirements, industry standards, and best practices; and (2) interviews of personnel and/or observation of exercises or drills to determine knowledge of established policy or procedure (DOE-STD-3006-93).

Work

Process of performing a defined task or activity; for example research and development, operations, maintenance and repair, administration, software

development and use, inspection, safeguards and security, data collection, and analysis (DOE 5700.6C).